

# **The Naval Ordnance Station Louisville: A Case Study of Privatization-in-Place**

By

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**CENTER FOR PUBLIC POLICY  
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# **The Naval Ordnance Station Louisville: A Case Study of Privatization-in-Place**

by

William Lucyshyn and Stephanie Novello<sup>i</sup>

## **Part I**

On the afternoon of March 7, 1996, Mike Seale, then Director of Public/Private Partnering for United Defense, waited anxiously while the Louisville/Jefferson County Redevelopment Authority (LJCRA) in Kentucky deliberated over the fate of the Naval Ordnance Station Louisville (NOSL). Seale and Tom Rabaut, the President/CEO of United Defense had just presented a proposal to the LJCRA for United Defense to privatize the Naval Ordnance Station “in place.” Privatization-in-place is a concept for privatizing military installations wherein the defense-related workload is retained at the privatized facility.<sup>1</sup> But Seale knew that if the LJCRA was willing to take a chance on United Defense, privatization-in-place of NOSL could be a win-win-win situation for the company, the city of Louisville, and the Navy.

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<sup>i</sup> This case was a joint effort of the University of Maryland’s Center for Public Policy and Private Enterprise (at the School of Public Policy) and the Naval Postgraduate School’s Graduate School of Business and Public Policy. William Lucyshyn is Senior Research Scholar at the Center for Public Policy and Private Enterprise, and Stephanie Novello was Graduate Research Assistant at the Center for Public Policy and Private Enterprise. This case was written under the supervision of Professor Jacques S. Gansler at the University of Maryland and was supported by RADM James B. Greene, USN (Ret) Acquisition Chair at the Graduate School of Business and Public Policy (Naval Postgraduate School).

## INTRODUCTION

During the 1995 Base Realignment and Closure (BRAC) process, the Department of Defense (DoD) recommended to the independent BRAC Commission, that the Louisville naval depot be closed and its workload transferred to several DoD facilities.

Louisville's naval gun repair workload was proposed to transfer to the Norfolk Naval Shipyard, Virginia; its Phalanx Close-In

Weapon System work to the Naval Surface

Warfare Center, Crane, Indiana; and its

engineering support functions to the Naval

Surface Warfare Center, Port Hueneme,

California. During the BRAC

Commission's review of DoD's

suggestions, the city of Louisville proposed

that DoD privatize the depot workload in

place, which at the time included

engineering of Naval surface weapon

systems, and overhaul and maintenance of

naval gun systems, including Phalanx

CIWS. The BRAC Commission

recommended the following (see Exhibit I for the full recommendation):

*“Close the Naval Surface Warfare Center, Crane Division Detachment, Louisville. Transfer workload, equipment, and facilities to the private sector of local jurisdiction as appropriate if the private sector can accommodate the workload onsite; or relocate necessary functions along with necessary personnel, equipment and support to other naval technical activities.”<sup>2</sup>*

### Phalanx Close-In Weapon System

The Phalanx Close-In Weapon System (CIWS—pronounced “sea-whiz”) is a fast-reaction, rapid-fire 20 mm gun system that provides US Navy ships with a terminal defense against anti-ship missiles and high-speed, low-level aircraft that have infiltrated a ship's primary defense envelope. CIWS automatically performs functions usually performed by separate, independent systems, such as searching, detecting, tracking, threat evaluation, firing, and kill assessments of targets, while providing for manual override. CIWS has been a mainstay self-defense system aboard nearly every class of ship since the late 1970s.



Subsequently, the Navy made a preliminary decision to privatize-in-place Louisville's depot operations. Privatization-in-place, as such, has been attempted at only a handful of bases around the country and the Louisville depot was the first to complete the process.<sup>3</sup> While it was not without its problems, the privatization of the Naval Ordnance Station Louisville was ultimately a success story for all parties involved.

## BACKGROUND

### Military Depots

Military depots are responsible for repairing, maintaining, and overhauling the weapon systems of the Army, Navy, Air Force, and Marines. Historically, each Service

#### Naval Guns

While the word "gun" is normally associated with a portable firearm, such as a rifle or revolver, naval guns are large, cannon-like weapons that are mounted on ships. The 5"/54 caliber Mk 45 Light Weight Gun Mount is the Navy's primary anti-surface gun battery and Naval Gun Fire Support weapon. The Mk 45 5-inch lightweight gun provides surface combatants with accurate gunfire against fast, highly maneuverable surface, air, and shore targets and threats. Its range is more than 13 nautical miles and it can fire 16-20 rounds per minute.



has maintained its own depot maintenance infrastructure. The Navy, for example, has maintained its ships in Navy shipyards since 1799 and its own aircraft at Navy facilities from the early 20<sup>th</sup> century. There has been some inter-servicing of repairs, but it has been very limited.<sup>4</sup>

The amount of work performed by the military depot system has varied over the years, depending on the type and number of military conflicts in which the United States was engaged.<sup>5</sup> Since the early 1970s, however, there

have been reported redundancies and excess capacity in DoD depots. More recently, the excess capacity problem has been exacerbated "by reductions in military force structure

and related weapon system procurement; changes in military operational requirements due to the end of the Cold War; and the increased reliability, maintainability, and durability of military systems.”<sup>6</sup>

### **History of NOSL**

Ground was broken in Louisville, Kentucky on January 29, 1941, for the construction of a plant that was to become the Naval Ordnance Station Louisville. The Louisville depot was to be similar to the ordnance facility located in Minneapolis, Minnesota, which was run by the FMC Corporation (later to become United Defense) and was the main production point for naval guns at the time. The depot consisted of 142 acres with approximately 84 buildings, totaling 1.5 million square feet.<sup>7</sup> The manufacturing space was housed primarily in ten buildings, which ranged in size from 104,000 square feet to 247,000 square feet.<sup>8</sup> The Louisville facility, which was commissioned as a Naval Shore Establishment (a facility that functions in support of shore activities for operating forces) under contract to Westinghouse Electric Corporation on October 1, 1941, produced some weaponry, but chiefly served as the repair and depot point.<sup>9</sup> At its peak, Westinghouse employed some 4,200 workers at the Louisville plant in the building or repairing of gun mounts, torpedo tubes, and other naval weapons.

**Figure 1. Aerial view of the Louisville facility**



When Westinghouse's contract with the Navy expired in February 1946, NOSL was returned to Navy control. The Navy retained approximately 500 employees—who were subsequently converted to civil service status—with the workforce maxing out at 850 by October of 1948. By August 1950, however, post-war declines in workload caused employment to fall to less than 100 workers.

With the onset of the Korean War, the Navy again needed NOSL support, and the facility ramped up its personnel and equipment. The workforce grew to 1,800 employees and NOSL increased and modernized its machine tools, test equipment, and plating operations. In addition, NOSL staffed the engineering department, established the quality assurance group, and set up service departments with specific missions, including a supply department assigned to purchasing and storage responsibilities.

By the 1990s, NOSL was the only Navy facility able to provide both major overhaul and complete engineering and technical support services for the Navy's surface weapon systems. NOSL remanufactured, repaired, and updated naval gun systems from 20 millimeters through five inches and provided engineering support for all naval guns. In addition, NOSL was the only approved engineering and overhaul facility for the Phalanx Close-In Weapon System (CIWS), the Navy's highly sophisticated anti-ship missile defense system. NOSL also manufactured gun barrels, missile hardware, and a wide variety of weapon system parts for the Navy and the other military services.<sup>10</sup>

Despite NOSL's unique capabilities, in the post-Cold War years the facility suffered from excess capacity. By 1996, the Louisville depot had a maximum potential capacity for 3.8 million direct labor hours, but was only performing 1.3 million hours of work, leaving the facility with 2.5 million hours of excess capacity and only 34 percent

utilization.<sup>11</sup> This made NOSL an ideal candidate for BRAC and, in fact, the depot was put on the list for the 1993 round. While NOSL eluded closure at that time, the experience would lead the facility and the city of Louisville down the road of privatization.

### **FMC Corporation/United Defense**

FMC, now United Defense (on June 27, 2005 United Defense was acquired by BAE Systems), has a long history of doing gun work for the Navy, starting in 1941 when it began building guns for the Service at the government-owned, contractor operated facility in Fridley just outside of Minneapolis, Minnesota.<sup>12</sup> At its peak during World War II, FMC produced about 1,000 guns per year for the Navy. During the 1950s, however, guns were largely being replaced by surface-to-surface missiles and demand for guns fell off dramatically. Demand continued to decline over the years and by 1996, FMC was producing approximately seven new Mk 45 5-inch guns per year.

Despite, or perhaps because of, its long history of producing guns for the Navy, FMC has had somewhat of an acrimonious relationship with NOSL. During the 1993 round of BRAC, FMC lobbied to have the Louisville facility closed down. FMC felt that it was unfair to have to bid for some of its contracts against NOSL, which, as a government-run facility, had rates that were subsidized by the American taxpayers and did not reflect total costs while FMC, as a private company, had to have auditable rates that reflected all costs and thus were often higher in comparison to the reported NOSL rates. Moreover, FMC argued that the Navy had 100 times the capacity that it needed. FMC, therefore, wanted the Navy to shut down the Louisville facility and move any



remaining workload to FMC's Minneapolis plant. FMC's campaign failed, however, as NOSL survived the 1993 BRAC round.

In 1994, in response to the continued post-cold-war downsizing of the military, the shrinking industrial base, and improvements in technology in a declining market, FMC and Harsco Corporation merged their defense units to form the United Defense Limited Partnership. The Carlyle Group bought United Defense in October 1997.<sup>13</sup> United Defense was taken public in December 2001. Carlyle had disposed of all its shares by the time of United Defense's acquisition by BAE Systems.

### **Hughes/Raytheon**

As the original equipment manufacturer (OEM) of the Phalanx Close-In Weapon System, a rapid-fire, computer-controlled, radar-guided gun system designed to defeat anti-ship missiles and other close-in air and surface threats,<sup>14</sup> Hughes Missile Systems Company (now Raytheon) also has a long history with the Navy. Hughes' relationship with Louisville, specifically, began in the early-to-mid 1980s, when NOSL began to develop its Phalanx overhaul capability. With Hughes as the OEM for Phalanx, NOSL and the company have worked together closely. Hughes Aircraft, the parent company of Hughes Missile Systems Company, merged with Raytheon Company in 1997.

## **THE ROAD TO PRIVATIZATION**

### **A Public/Private Partnership**

Despite escaping closure in the 1993 BRAC, Jerry Abramson, the Mayor of Louisville, knew that NOSL may not be so lucky the next time. What is more, the loss of the naval overhaul depot was not something that the city of Louisville could tolerate.

Abramson anticipated that the depot closure would result in the loss of 1,200-1,400 jobs and a reduction in local payroll of more than \$25 million.<sup>15</sup> With the 1995 BRAC just around the corner, Abramson believed that the city of Louisville needed to come up with some way to save its depot facility from the looming threat of closure. It was about that time that Abramson read about the Letterkenny Arsenal, an Army depot located in Pennsylvania that had been able to forestall a planned closure by forming a partnership with a private sector company. Under the Letterkenny public/private partnership, the Army disassembled M109 self-propelled howitzers but privatized the conversion/upgrade work to a company called United Defense.

Abramson's idea was to avoid BRAC by convincing the Navy to bring United Defense to Louisville to model a public/private partnership after the Letterkenny Arsenal joint venture. He wanted the Navy to privatize one of the 20 buildings and one of the smaller/newer product lines in the NOSL complex with the help of United Defense (leaving the other 19 buildings and product line activities as they were). With the plan formed, Abramson went on a series of trips to Washington, DC to pitch the public/private partnership idea to members of DoD, the Clinton Administration, and Congress.

### **United Defense and Louisville Meet**

In October 1994, Abramson and members of the Louisville Chamber of Commerce were in Washington for one of their meetings with government officials. Mike Seale, a United Defense executive in its Minneapolis Armament Systems Operation (and a Louisville native), also happened to be in Washington at the same time pursuing post-BRAC depot partnership opportunities. On the evening of October 13, Seale received a call from United Defense CEO Tom Rabaut. Rabaut asked Seale to attend a

meeting the next morning with Jerry Abramson and the Louisville Chamber to discuss a possible partnership with the city over NOSL. Seale agreed and at 6:30 a.m. the next morning Seale listened intently as Abramson pitched to him for 40 minutes the idea of a public/private partnership between NOSL and United Defense built around the possible overhaul and upgrade of the Marine Corps' Amphibious Assault Vehicle (AAV). When Abramson was done, Seale smiled at him and said, "So Jerry, what high school did you go to in Louisville? Did you go to Seneca?" Abramson, quite surprised, responded, "Do you know something about Louisville?" Seale then confessed that he had grown up in the city. The ice was broken and a dialogue between United Defense and Louisville began in earnest.

Over the course of the next several months, there were a number of other meetings between United Defense and the city of Louisville, with Seale visiting the Louisville depot and meeting members of the Congressional delegation and those in the community who cared about the project. At that point, however, it was clear to Seale that Louisville was only interested in the partnership to avoid closure. His intuition was confirmed when, after Louisville learned in December 1994 that they had a good chance of avoiding BRAC, the city kindly thanked Seale for his interest and sent United Defense packing.

### **Privatization-in-Place**

In late January of 1995, however, Louisville found out that NOSL was back on the BRAC closure list. The BRAC Commission had tentatively recommended transferring the naval gun workload to Norfolk Naval Shipyard, Virginia, and the Phalanx workload to the Naval Surface Warfare Center, Crane, Indiana.<sup>16</sup>

City officials immediately called Seale at United Defense and said that they had to come up with something BIG, not just a one-building/one-product privatization; Louisville wanted to privatize the whole depot operation. Seale was in somewhat of a quandary over what to do. The way he saw it, United Defense had two basic options. It could either work on trying to shut NOSL down, which it had tried and failed back in 1993, or it could partner with Louisville on privatization. Seale would have preferred for NOSL to be closed, but he feared that if United Defense did not pursue the partnership, Louisville would recruit some other company, who would then be in a good position to take over United Defense's naval gun business conducted mostly in Minneapolis. With the knowledge that trying to shut NOSL down was high risk, United Defense chose to once again proceed along the partnership direction.

Over the next four months, Seale and a team of United Defense people worked intensely with the individuals at NOSL to get a better picture of the business. At the time, NOSL had some 40 product lines that United Defense had to learn about and understand. As part of his assessment of operations at NOSL, Seale determined that two of the 40 products constituted about 60 percent of the work. One of those two main product lines, however, the Phalanx Close-In Weapon System, was outside of United Defense's production portfolio. Key NOSL personnel recommended that they bring Hughes Missile System Company (now Raytheon), the OEM for Phalanx, into the picture and in May 1995, Hughes joined with the city to convince the BRAC Committee of the viability of privatization.<sup>17</sup> With Hughes on board the project and Seale at the helm of the United Defense team, United Defense plunged ahead, working with the Louisville stakeholders to collaboratively create a plan to privatize the NOSL business in place.

Once they had the privatization plan cemented, the next step was to sell the plan in Washington. The City of Louisville engaged a law firm to lobby the privatization plan to key government players and their strategy paid off when, in June 1995, the BRAC Commission recommended privatization of the NOSL facility and workload. In August 1995, President Clinton accepted the BRAC Commission's recommendation.<sup>18</sup>

The Navy estimated that transferring the work to other naval facilities would cost approximately \$302 million, while the privatization-in-place option (see Exhibits II and III for legal limitations) would cost \$132 million, or \$170 million less. With these estimates in hand, the Navy reversed their earlier closure recommendation and concluded that the privatization-in-place option was more cost-effective.<sup>19</sup>

## **THE COMPETITION**

After their successes with the BRAC Commission that Fall, Seale was eager to plunge ahead with privatization plans. The city seemed ready to move forward too, as it had formed the Louisville/Jefferson County Redevelopment Authority in September to aid in the privatization of the depot facility. But, by late Fall, Louisville became unresponsive to Seale's phone calls. Previously, he had been in constant communication with the Louisville leadership. Seale knew that something was not right. When he finally tracked the city down, they informed him that they were planning to use the privatization plan that United Defense and Hughes had worked on as a template for a competition among multiple companies. The idea was that with competition would come concessions and a more favorable contract for the city and residents of Louisville. Seale was stunned. Up to that point, United Defense was under the impression that it and

Hughes were the only companies involved. Hughes was surprised as well; one company representative called Seale up exclaiming, “They’re going to compete this!!!!!!”

At such a late stage in the game, United Defense really did not have many options open. As Seale put it, “All we could do at that point [was] either try to stop the whole thing, bail out of the whole thing, or go with the flow. And we went with the flow.”

With the LJCRA setting up a competition to determine what company or companies would get to privatize NOSL, the next step for Seale and United Defense was to develop a proposal of their privatization plan for the city of Louisville. The city told Seale that they were really looking for a company that would come in to Louisville and be a leader in the community; that would be involved, bring jobs to the city, and grow. Taking this advice to heart, Seale focused United Defense’s proposal around the company’s contribution to the community, discussing all of the product lines it would keep at the Louisville depot, the new products it would locate at NOSL, and the new jobs it would create in the city.

On March 7, 1996, United Defense presented its proposal to the Louisville/Jefferson County Redevelopment Authority (LJCRA). Two other companies presented that day: Lockheed Martin and Hughes. United Defense was the last company to go. After a 45-minute presentation by CEO Tom Rabaut, Rabaut and Seale anxiously awaited the LJCRA’s decision. Fifteen minutes later, the Authority came back with its choice: United Defense, along with Hughes, had won the competition. United Defense was to take over the gun systems repair and overhaul effort, while Hughes would take on Phalanx system production, overhaul, and repair.

In Seale's perspective, the entire competition process essentially had been a way to put pressure on United Defense and Hughes to make commitments to the city and the community, including promises not to allow United Defense's Minnesota facility to compete for any of the work done in Louisville and to bring new product lines to the area. Either way, however, Seale saw the impending privatization as a win-win-win situation for the private companies, the Navy, and the city of Louisville.

## **Part I Questions**

1. Identify the various stakeholders and their interests.
2. How will the proposed privatization-in-place proposal affect the Navy's issue of excess public depot capacity?
3. What are the qualitative benefits of privatizing-in-place?
4. What are the factors that should be considered when considering the privatization-in-place option?
5. What are the legal limitations to public depot privatization?
6. What are the benefits and issues associated with allowing the redevelopment authority to conduct the competition?



## **Exhibit I**

Excerpt from

### **Defense Base Closure and Realignment Commission**

#### **March 1995 Report to the President**

##### **Naval Surface Warfare Center, Crane Division Detachment, Louisville, Kentucky**

Category: Navy Maintenance Depot

Mission: In-Service Engineering for Naval gun systems

One-time Cost: \$103.9 million

Savings: 1996-2001: \$39.4 million (Cost)

Annual: \$28.6 million

Return on Investment: 2003 (3 years)

**FINAL ACTION:** Close

#### **Secretary of Defense Recommendation**

Close the Naval Surface Warfare Center, Crane Division Detachment, Louisville, Kentucky. Relocate appropriate functions, personnel, equipment, and support to other naval activities, primarily the Naval Shipyard, Norfolk, Virginia; the Naval Surface Warfare Center, Port Hueneme, California; and the Naval Surface Warfare Center, Crane, Indiana.

## **Secretary of Defense Justification**

There is an overall reduction in operational forces and a sharp decline of the DON budget through FY 2001. Specific reductions for technical centers are difficult to determine, because these activities are supported through customer orders. However, the level of forces and the budget are reliable indicators of sharp declines in technical center workload through FY 2001, which leads to a recognition of excess capacity in these activities. This excess and the imbalance in force and resource levels dictate closure/realignment or consolidation of activities wherever practicable. Consistent with the Department of the Navy's efforts to remove depot level maintenance workload from technical centers and return it to depot industrial activities, this action consolidates ships' systems (guns) depot and general industrial workload at NSYD Norfolk, which has many of the required facilities in place. The functional distribution of workload in this manner offers an opportunity for cross-servicing part of the gun plating workload to the Watervliet Arsenal in New York. System integration engineering will relocate to NSWC Port Hueneme, with the remainder of the engineering workload and Close-In-Weapons System (CIWS) depot maintenance functions relocating to NSWC Crane. The closure of this activity not only reduces excess capacity, but relocation of functional workload to activities performing similar work will result in additional efficiencies and economies in the management of those functions.

## **Community Concerns**

The Louisville community believes that \$240 million of closure related costs were improperly excluded from the one-time closure costs by the Navy. The community is concerned about the economic impact and has made a proposal for a public-private

partnership involving two private companies, the Navy, and the City of Louisville. This proposal would be implemented as an alternative reuse of the closed facility. The community is concerned that a recommendation not interfere with its proposal.

### **Commission Findings**

The Commission found that the Navy did not estimate the necessary Technical Repair Standard (TRS) costs at the Norfolk Naval Shipyard, and that implementation of this transferring workload could require an additional \$18 million in TRS costs. The Commission also found that the Navy did not include \$13.4 million in closure related moving costs. The Commission found that these additional costs would increase the one-time cost to close to \$136 million. A Naval Audit Service Report was conducted as a result of allegations about improper handling of data call information from Louisville to the Base Structure Analysis Team. The Commission found that the Naval Audit Service Report would have no impact on the Navy's decision to recommend closure of NSWC Louisville. The Commission found that the gun systems engineering functions at Louisville are consistent with operational requirements, and that collocation of these engineering functions with the maintenance and overhaul functions performed at the facility has contributed substantially to the effectiveness of the facility in serving the Department of the Navy. These integrated engineering, maintenance and overhaul capabilities, along with NSWC Louisville's plating facility, led the Commission to strongly urge the Department of the Navy to allow privatization of these assets.

The Commission found that if the Community proposal for privatization of NSWC Louisville is successful, the costs and savings estimated by DoD could be different. As a result of this uncertainty, and because the Commission is prohibited from considering

reuse planning when making its recommendations, the Commission accepted and used the DoD cost and savings data in its deliberations. The Commission has also identified uncertainties in the Navy's cost to close but these are speculative because the future of this facility is unknown. The Commission adopted the DoD costs in making its final recommendation. The Commission adopted the DoD recommendation to close NSWC Louisville, but provided the Navy discretionary authority to implement fully the Community's proposal.

### **Commission Recommendation**

The Commission finds the Secretary of Defense deviated substantially from final criteria 1 and 4. Therefore, the Commission recommends the following: close the Naval Surface Warfare Center, Crane Division Detachment, Louisville. Transfer workload, equipment and facilities to the private sector or local jurisdiction as appropriate if the private sector can accommodate the workload onsite; or relocate necessary functions along with necessary personnel, equipment and support to other naval technical activities, primarily the Naval Shipyard, Norfolk, Virginia; Naval Surface Warfare Center, Hueneme, California; and the Naval Surface Warfare Center, Crane, Indiana. To the extent that workload is moved to the private sector, such personnel as are necessary should remain in place to assist with transfer to the private sector; to perform functions compatible with private sector workload, or are necessary to sustain or support the private sector workload, and to carryout any transition activities. The Commission finds this recommendation is consistent with the force-structure plan and final criteria.

## Exhibit II

**10 USC Sec. 2469**

01/19/04

TITLE 10 - ARMED FORCES

Subtitle A - General Military Law

PART IV - SERVICE, SUPPLY, AND PROCUREMENT

CHAPTER 146 - CONTRACTING FOR PERFORMANCE OF CIVILIAN COMMERCIAL OR  
INDUSTRIAL TYPE FUNCTIONS

Sec. 2469. Contracts to perform workloads previously performed by  
depot-level activities of the Department of Defense: requirement  
of competition

-STATUTE-

(a) Requirement for Competition. - The Secretary of Defense shall ensure that the performance of a depot-level maintenance and repair workload described in subsection (b) is not changed to performance by a contractor or by another depot-level activity of the Department of Defense unless the change is made using -

(1) merit-based selection procedures for competitions among all depot-level activities of the Department of Defense; or

(2) competitive procedures for competitions among private and public sector entities.

(b) Scope. - Except as provided in subsection (c), subsection (a) applies to any depot-level maintenance and repair workload that has a value of not less than \$3,000,000 (including the cost of labor and materials) and is being performed by a depot-level activity of the Department of Defense.

(c) Exception for Public-Private Partnerships. - The requirements

of subsection (a) may be waived in the case of a depot-level maintenance and repair workload that is performed at a Center of Industrial and Technical Excellence designated under subsection (a) of section 2474 of this title by a public-private partnership entered into under subsection (b) of such section consisting of a depot-level activity and a private entity.

(d) Inapplicability of OMB Circular A-76. - Office of Management and Budget Circular A-76 (or any successor administrative regulation or policy) does not apply to a performance change to which subsection (a) applies.

-SOURCE-

(Added Pub. L. 102-484, div. A, title III, Sec. 353(a), Oct. 23, 1992, 106 Stat. 2378; amended Pub. L. 103-160, div. A, title III, Sec. 346, title XI, Sec. 1182(a)(7), Nov. 30, 1993, 107 Stat. 1625, 1771; Pub. L. 103-337, div. A, title III, Sec. 338, Oct. 5, 1994, 108 Stat. 2718; Pub. L. 104-106, div. A, title III, Sec. 311(f)(1), Feb. 10, 1996, 110 Stat. 248; Pub. L. 105-85, div. A, title III, Secs. 355(b), 363, Nov. 18, 1997, 111 Stat. 1694, 1702; Pub. L. 106-65, div. A, title III, Sec. 334, Oct. 5, 1999, 113 Stat. 568; Pub. L. 108-136, div. A, title III, Sec. 333, Nov. 24, 2003, 117 Stat. 1442.)

## Exhibit III

10 USC Sec. 2466

01/19/04

TITLE 10 - ARMED FORCES

Subtitle A - General Military Law

PART IV - SERVICE, SUPPLY, AND PROCUREMENT

CHAPTER 146 - CONTRACTING FOR PERFORMANCE OF CIVILIAN COMMERCIAL OR

INDUSTRIAL TYPE FUNCTIONS

Sec. 2466. Limitations on the performance of depot-level

maintenance of materiel

-STATUTE-

(a) Percentage Limitation. - Not more than 50 percent of the funds made available in a fiscal year to a military department or a Defense Agency for depot-level maintenance and repair workload may be used to contract for the performance by non-Federal Government personnel of such workload for the military department or the Defense Agency. Any such funds that are not used for such a contract shall be used for the performance of depot-level maintenance and repair workload by employees of the Department of Defense.

(b) Waiver of Limitation. - The Secretary of Defense may waive the limitation in subsection (a) for a fiscal year if -

(1) the Secretary determines that the waiver is necessary for reasons of national security; and

(2) the Secretary submits to Congress a notification of the waiver together with the reasons for the waiver.

(c) Prohibition on Delegation of Waiver Authority. - The authority to grant a waiver under subsection (b) may not be delegated.

(d) Annual Reports. - (1) Not later than February 1 of each year, the Secretary of Defense shall submit to Congress a report identifying, for each of the armed forces (other than the Coast Guard) and each Defense Agency, the percentage of the funds referred to in subsection (a) that were expended during the preceding two fiscal years for performance of depot-level maintenance and repair workloads by the public and private sectors, as required by this section.

(2) Not later than April 1 of each year, the Secretary of Defense shall submit to Congress a report identifying, for each of the armed forces (other than the Coast Guard) and each Defense Agency, the percentage of the funds referred to in subsection (a) that are projected to be expended during each of the next five fiscal years for performance of depot-level maintenance and repair workloads by the public and private sectors, as required by this section.

(3) Not later than 60 days after the date on which the Secretary submits a report under this subsection, the Comptroller General shall submit to Congress the Comptroller General's views on whether

(A) in the case of a report under paragraph (1), the Department of Defense has complied with the requirements of subsection (a) for the fiscal years covered by the report; and

(B) in the case of a report under paragraph (2), the expenditure projections for future fiscal years are reasonable.



(Added Pub. L. 100-456, div. A, title III, Sec. 326(a), Sept. 29, 1988, 102 Stat. 1955; amended Pub. L. 101-189, div. A, title III, Sec. 313, Nov. 29, 1989, 103 Stat. 1412; Pub. L. 102-190, div. A, title III, Sec. 314(a)(1), Dec. 5, 1991, 105 Stat. 1336; Pub. L. 102-484, div. A, title III, Sec. 352(a)-(c), Oct. 23, 1992, 106 Stat. 2378; Pub. L. 103-337, div. A, title III, Sec. 332, Oct. 5, 1994, 108 Stat. 2715; Pub. L. 104-106, div. A, title III, Secs. 311(f)(1), 312(b), Feb. 10, 1996, 110 Stat. 248, 250; Pub. L. 105-85, div. A, title III, Secs. 357, 358, 363, Nov. 18, 1997, 111 Stat. 1695, 1702; Pub. L. 106-65, div. A, title III, Sec. 333, Oct. 5, 1999, 113 Stat. 567; Pub. L. 107-107, div. A, title III, Sec. 341, Dec. 28, 2001, 115 Stat. 1060; Pub. L. 108-136, div. A, title III, Sec. 332, Nov. 24, 2003, 117 Stat. 1442.)

# **The Naval Ordnance Station Louisville: A Private Sector Perspective on Privatization-in-Place**

by

William Lucyshyn and Stephanie Novello

## **Part II**

### **PRIVATIZATION BECOMES A REALITY**

#### **Preparing for “Hot Turnover:” The Contracts and Agreements**

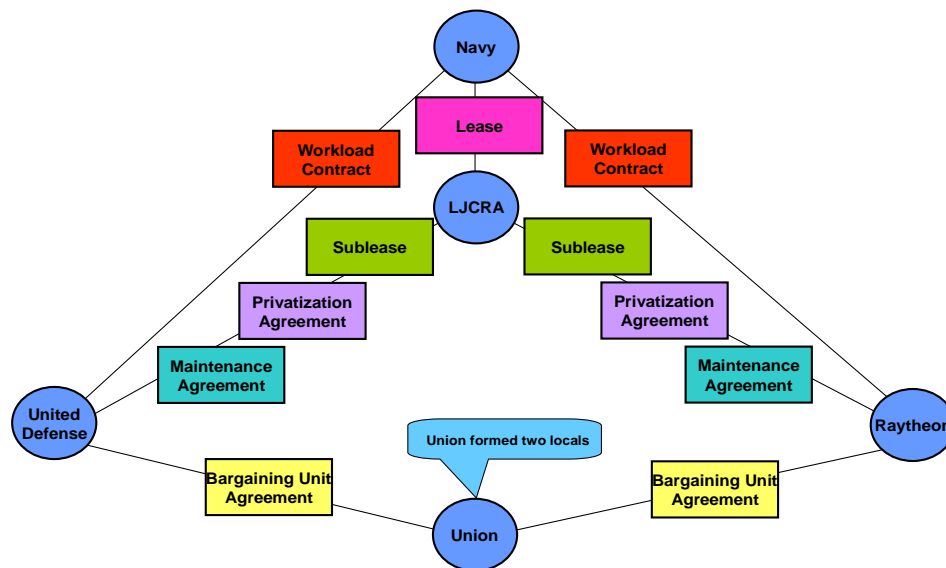
Prior to the turnover, United Defense negotiated and put in place 11 major agreements (see Figure 2). The turnover was to be complete and instantaneous—“hot”—and required thorough preparation. On its end, United Defense was committed to: establishing a world class gun facility; performing transition improvements; recognizing the union; giving preferential hiring treatment to former employees; not transferring jobs to other United Defense locations; hiring a minimum number of employees; and bringing in additional business and jobs.

The final agreement between Louisville and United Defense consisted of a series of different types of contracts over designated time periods.<sup>20</sup> The performance contract covered a six week base period (August 19 – September 30, 1996), plus five one-year option contracts corresponding to the federal government fiscal years (FY) 1997 through 2001.

⇒ **Contract for FY 96 and FY 97 = Cost Plus Fixed Fee:** The Navy would pay the cost of producing the item plus a fixed fee of 4 percent.

- ⇒ **Contract for FY 98 = Cost Plus Award Fee**: The Navy would pay for the cost of the item and then a percentage based on a cost savings determination. If United Defense established cost savings they could earn as much as 7 percent of the cost. The “award” determination was made by the government. There was a low guarantee from the Navy and high risk for United Defense, particularly early on.
- ⇒ **Contract Type for FY 99 – FY 01 = Combination of Cost Plus Award Fee and Firm Fixed Price**: The firm fixed price portion required United Defense to successfully perform the contract and deliver items for a price agreed to up-front.

**Figure 2. United Defense Contracts and Agreements  
With Navy, Raytheon, LJCRA , and Unions**



Source: United Defense

In addition, the contract stipulated that United Defense was required to purchase material from the Defense Base Operating Fund (DBOF) Inventory if available prior to purchasing from another source, introducing an extra acquisition step for the company.

The company was also required to be ISO Compliant<sup>21</sup> by August 18, 1999. Another requirement that proved exceptionally burdensome was to assume responsibility for and track all federal property—there were 700,000 lines of government property and it took four years for United Defense to inventory all of the material left at the depot. United Defense, however, was exempt from using MMAS (Government Property and Material Management and Accounting System), FAR (Federal Acquisition Regulation), and DFARS (Defense Federal Acquisition Regulations Supplement) Clauses for a two year period (through August 18, 1999).<sup>22</sup>



### **Preparing for the “Hot Turnover:” Employees**

To prepare for the turnover of the depot from the government to the private sector, in April 1996 United Defense brought in Linda Medley, who had previously worked with the company’s Bradley fighting vehicle operation in California. Her first task was to ensure that the depot was sufficiently staffed when the turnover occurred and employment offers were extended to government workers at the NOSL facility. As a part of its deal with the city of Louisville, United Defense had agreed that no NOSL employees would lose any pay because of privatization. United Defense had also agreed to take past government service into account when determining benefits like vacation time, so that someone with 25 years of service would walk into a United Defense job with a minimum of four weeks of vacation. Moreover, even if a former Navy employee took a job with United Defense, they would have up to five years to change their minds

and transfer elsewhere to a government job. Despite these guarantees, United Defense had difficulty enlisting staff from existing ranks. Seale had projected that United Defense needed 422 workers, but of the 866 NOSL employees doing gun work privatized by United Defense, only 342 took jobs with United Defense. The 524 former Navy employees who did not join United Defense either shifted to other Navy or government jobs nationwide, took other private-sector jobs, or retired.<sup>23</sup> In addition, the company gave those who did not join United Defense preferential hiring treatment for future positions, offering the right of first refusal to fill job openings to former qualified NOSL employees.

Hughes also had to staff its Louisville operation in preparation for the turnover. Like United Defense, Hughes agreed to match existing salaries so that everyone who made the switch to the private sector got the same salary that they had when they were with the government. In addition, Hughes offered a benefits package that was very comparable to government benefits and gave credit for seniority, taking into account time served with the government. Hughes made employment offers to virtually all the government employees who worked on the Phalanx overhaul program and had somewhat more success than United Defense in recruiting government employees to join the private sector ranks. Of the 234 offers made, 189 people accepted. Those who did not take jobs with Hughes either took early retirement packages or went to work for the government in another capacity.

#### **“Hot Turnover” Day, August 19, 1996**

On August 19, 1996, privatization of the Naval Ordnance Station Louisville was implemented as an instantaneous “hot turnover.” Workload and employees were

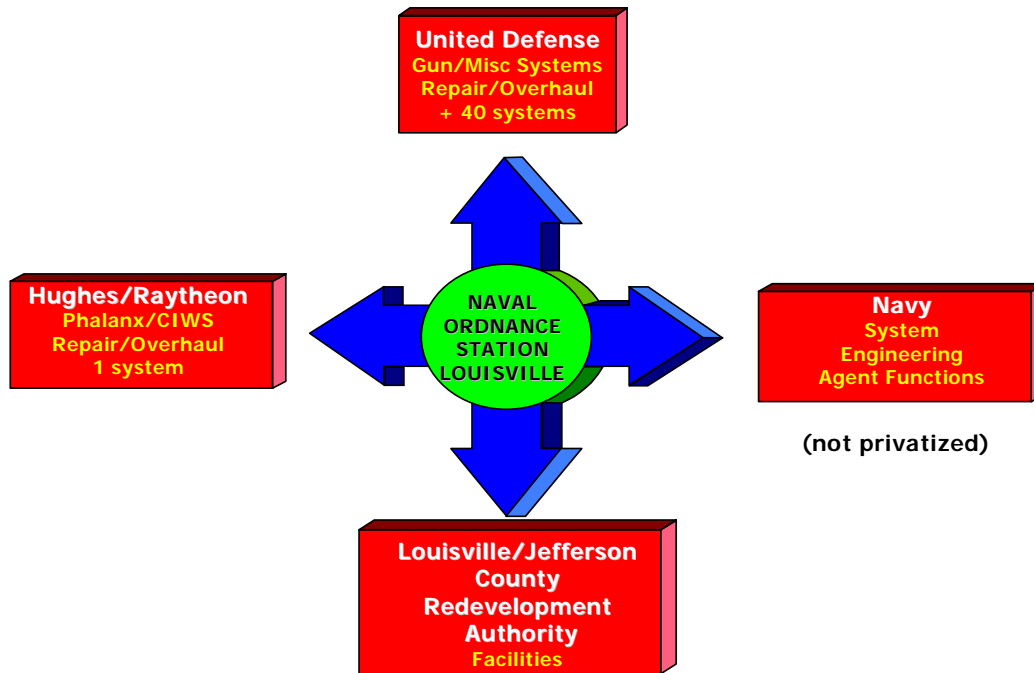
transferred to United Defense and Hughes in an instantaneous transaction. NOSL responsibilities were distributed between United Defense, Hughes, the local government, and a small government workforce (see Figure 3). United Defense took over the guns, miscellaneous repair, and overhaul systems. Hughes took over Phalanx CIWS production, overhaul, and repair. The Navy Engineering Agent continues to have a small presence on the base, supporting the Navy's gun systems and providing leadership in the acquisition, production, and operational support of in-service and emerging naval gun weapon



systems, integrated ship defense systems, and equipment.<sup>24</sup> In October 1997, the remaining government presence at NOSL became known as the Naval Surface Warfare Center Port Huemene Division Louisville Detachment.<sup>25</sup> The privatized portion of the NOSL facility was subsequently renamed the Technology Park of Greater Louisville.<sup>26</sup>

The Louisville/Jefferson County Redevelopment Authority, whose primary duties are to redevelop the facility through marketing and to create jobs, manages the operations and maintenance of the Technology Park through a contract with Titan Research & Development Louisville LLC.<sup>27</sup> Titan subleases the space to United Defense (now BAE Systems), Hughes/Raytheon, and other tenants. Titan is responsible for the management and maintenance of common property, while United Defense and Hughes/Raytheon maintain their respective subleased properties.<sup>28</sup> In 2004, the Navy ceded the title to the Technology Park to the LJCRA.<sup>29</sup>

**Figure 3. What Was Privatized**



Source: United Defense

## POST PRIVATIZATION REALITY

### United Defense

Ultimately, the privatization of NOSL was a success story, but it was not without its problems. When United Defense arrived on the scene, things at NOSL were pretty bad. As Mike Seale put it, the first three months after turnover was a “literal horror story.” In anticipation of the transfer, the Navy had let business processes and discipline erode at NOSL and existing management, to a significant extent, had already checked out. Moreover, Louisville was a hot turnover without adequate work. United Defense found that it had a surplus of shop-floor people, while it was grossly understaffed with too few talented managers who had knowledge of business processes and could reengineer and improve production processes. In hindsight, Seale and Medley estimated

that they really needed a massive transition staff, two or three times the number of salaried experienced managers that they had started with, just to accomplish all of the relearning and reprocessing that was vital for a successful transition. But due to customer pressure to keep their product costs down, United Defense could not add the right staff that they really needed to get their business processes fixed sooner. Instead, they “bootstrapped it” and, as Medley put it, “we lived with cancer for four years while trying to go to work everyday.”

United Defense also had to contend with the ingrained culture of NOSL. The NOSL employees that stayed on with United Defense were used to doing things the way the Navy had done them and had no idea how things operated in the private sector. Seale and Medley had to facilitate the shift from a “government” ethos to a more business-oriented culture, which was no small undertaking.

United Defense saw a few other disappointments as well. The company received much less work than the Navy had originally projected. It also had to spend millions to bring the facility up to code. In addition, it lost some of its Mk75 gun work and its Army machine gun work to a Coast Guard and Army depot, respectively. United Defense also had difficulty keeping individual product prices down. When the ordnance station was run by the Navy, different accounts were used to cover any expenses over the estimated price of a product. United Defense, however, had neither the legal authority nor the capital to cover costs that were higher than estimates. While the company was able to significantly increase efficiency, the prices of new guns and overhauls were increased to cover all costs, such as those that the Navy had previously subsidized from other accounts, including the cost of overhead. Overall it was a win because United Defense



could cover its overall costs and the Navy purchased the items at lower overall costs, but on an item-priced level costs went up.

### **Hughes/Raytheon**

Not long after the hot turnover, Hughes was bought by Raytheon. And while Raytheon also had difficulty keeping product prices down, overall, the realities of privatization were less harsh for Raytheon than they were for United Defense. As Ed Given describes Raytheon's experience with privatization, "Ours was different from United Defense's." The turnover went more smoothly for Raytheon for a number of reasons. Probably the most important distinguishing aspect was the fact that Raytheon took over only one product—Phalanx CIWS—while United Defense assumed responsibility for some 40 different product lines. In addition, Raytheon brought on former government employees who had worked for NOSL prior to privatization to lead the transition, whereas United Defense brought in a team from the outside. Ed Given, Department Director for Phalanx under the government-run facility, and Warren Dill, who had headed production and engineering prior to privatization, were hired as Raytheon employees. Dill, in fact, went to work for Raytheon in June 1996, while still remaining a government employee up until the hot turnover date. This unique personnel situation, for which Dill had to receive a special legal ruling from Washington, enabled him to serve as a liaison between NOSL and Raytheon, easing the transition. In addition, having an in-house transition team probably allowed Raytheon to sidestep some of the cultural problems that United Defense experienced. The culture shift from government sector to private sector was also likely easier for Raytheon because the company had fewer existing government employees: 234, as opposed to United Defense's 800 plus.

Raytheon also had a better concept of the business systems and processes at NOSL than did United Defense. Because Raytheon was the OEM for Phalanx, the two sides had worked closely together before and they continued to work with many of the same people during the turnover. Moreover, the Phalanx operation at NOSL had a lot of data on the labor and material content for their product, including the actual touch labor hours required to do an overhaul and the materials that went into an overhaul. Understanding of business processes were further improved when Raytheon brought their entire Phalanx operation entirely under one roof by moving the production of new Phalanx systems from Tucson, Arizona to Louisville.

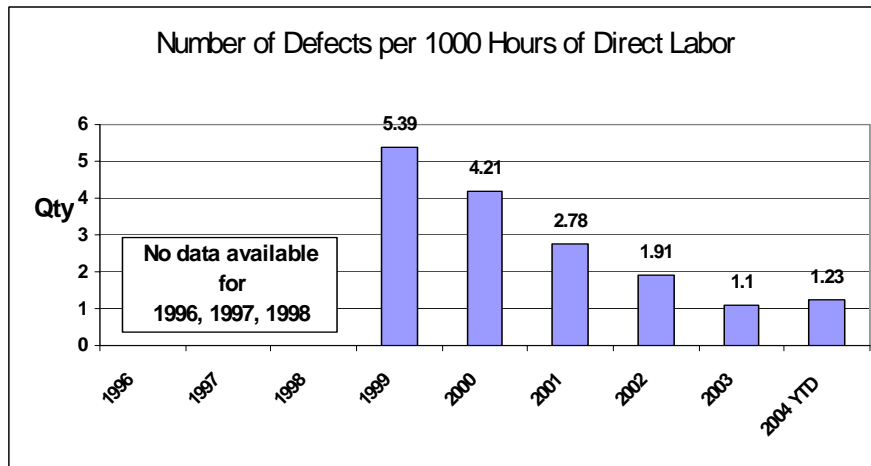
Finally, the Raytheon annex at the NOSL facility was a much newer building than any of the buildings in which United Defense was operating. Therefore, Raytheon did not experience the facility infrastructure problems that United Defense underwent.

### **Successes**

Although United Defense, and Raytheon to an extent, found the business systems and other challenges to be much greater than originally anticipated, they were not insurmountable. Ultimately, the privatization of NOSL was a win-win-win situation for the Navy, the city, and the two private defense contractors involved. For its part, the Navy got rid of the overhead costs of operating the depot, including elimination of its headcount and payroll, while still retaining key naval gun manufacturing skills. The Navy also saw an improvement in product quality, availability, reliability, and maintainability (see Figures 4 and 5), and gun overhauls are now more comprehensive, better meeting the Navy's needs. Moreover, the Louisville community now treats the Navy as a friend, not a foe (as

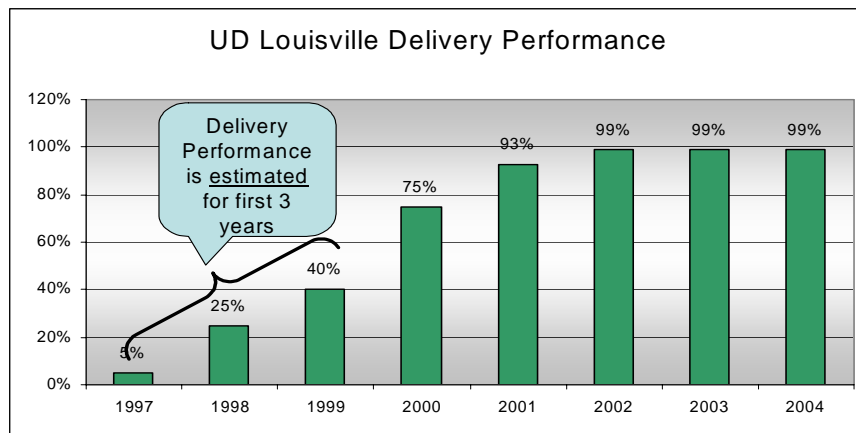
it would have if closure had occurred). The Navy’s budget also now receives substantial support from the Kentucky Congressional delegation.

**Figure 4. United Defense Product Quality**



Source: United Defense

**Figure 5. United Defense On-Time Delivery Performance**



Source: United Defense

Because of the commitments that the city obtained from United Defense and Raytheon, Louisville secured a number of victories from privatization. Most importantly, the city saved jobs. If privatization had not gone through, NOSL would have closed altogether and all of the jobs would have been lost. But thanks to the privatization-in-

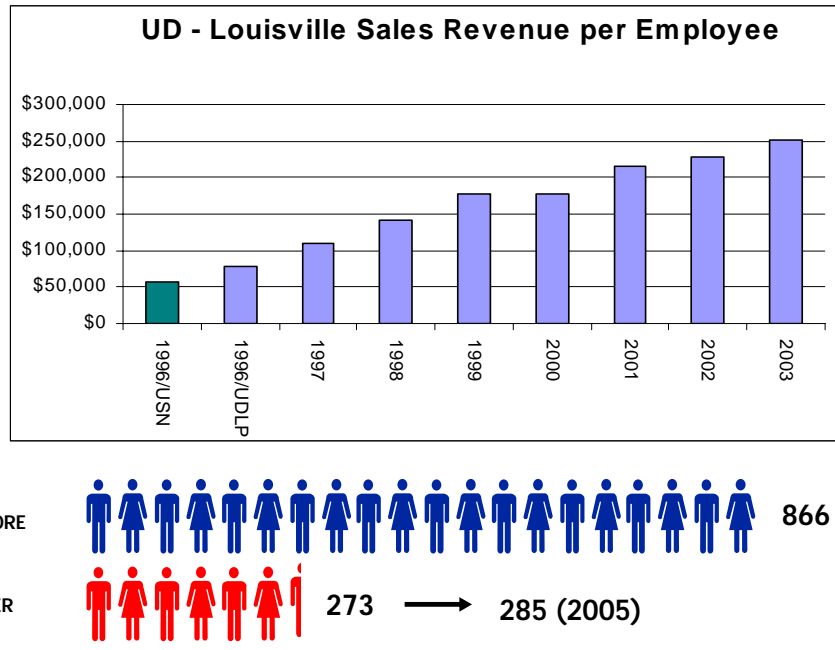
place, as of June 2004, about 900 employees work at the Technology Park of Greater Louisville, with over 500 of them employed by the private defense companies. It is estimated that the current payroll at the Technology Park is around \$30 million.<sup>30</sup> Privatization also brought new production to the city of Louisville. For example, Raytheon moved the manufacturing of the Phalanx CIWS from Tucson to Louisville after privatization and United Defense relocated the Mk 45 new gun assembly line from Minneapolis to Louisville.

From the perspectives of United Defense and Raytheon, privatization brought many successes as well. One of United Defense's most proud accomplishments is the quadrupling of plant productivity in eight years, while simultaneously streamlining the workforce (see Figure 6)—while offering jobs to all displaced employees. In addition, United Defense improved morale and attendance at the depot facility and developed positive union relationships and contracts. Health and safety have improved significantly as well, as seen in a drop in the recordable injury rate, the lost workday case rate, and the number of first aid/near-miss cases.<sup>31</sup> In fact, United Defense's Louisville operation was the winner of the Chairman's safety award. The company also shepherded in a number of facility and process improvements. It earned ISO-9001 certification,<sup>32</sup> made over \$17 million in new investment in the plant and the business,<sup>33</sup> and served as a conduit for Technology Park improvements.

Like United Defense, Raytheon also saw an increase in productivity. On top of that, the company witnessed a rise in demand for the Phalanx product and growth in the number and types of products assembled. In fact, Raytheon's Louisville operation

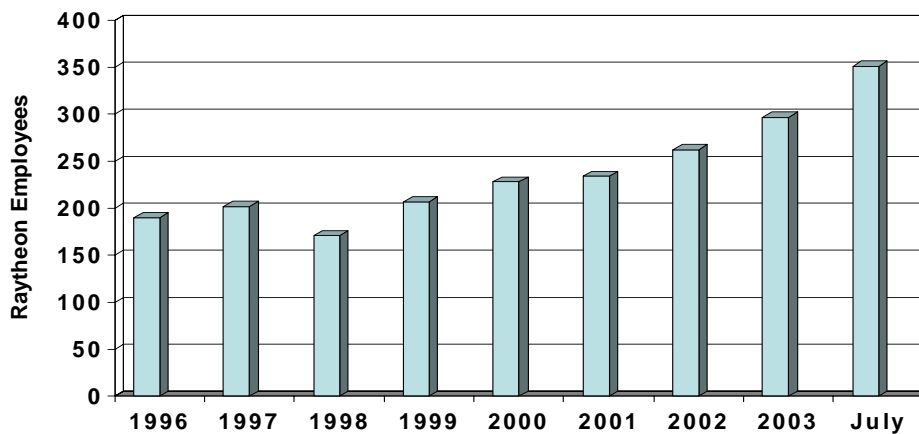
experienced a doubling of business in October 2003. Raytheon also increased the workforce at the Louisville facility (see Figure 7).

**Figure 6. United Defense Plant Productivity**



Source: United Defense

**Figure 7: Raytheon-Louisville Staffing History**

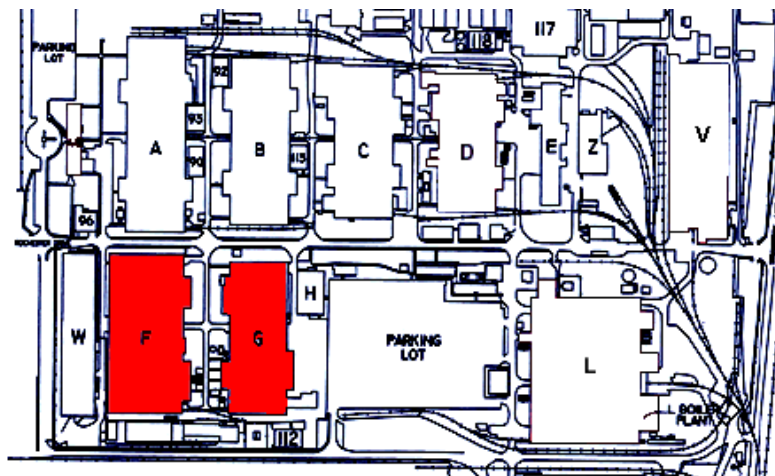


Source: Raytheon

## PROSPECTS FOR THE FUTURE

Since military depots are, in many cases, one of a region's largest employers, efforts to reduce excess capacity—i.e., cutting jobs—turns this exercise into a political process as much as a prudent business decision to lower costs. This case demonstrates that privatization of military depots is, in many instances, a more palatable option to outright closure...Once privatized, the private sector can, more readily, adjust the production capacity to the needs of the DoD.

Today, the Technology Park of Greater Louisville is home to a wide range of facilities equipped with heavy overhead cranes, machine tools, industrial plating equipment, blasting and painting booths, material handling equipment, storage systems, and office furniture.<sup>34</sup> Aside from United Defense, Raytheon, and the Navy Engineering detachment, other current tenants include Applied Surface Technology Inc., CACI, Defense Contract Management, DTI Associates, Integrated Consulting Services, Integrated Information Systems Inc., LNO Credit Union, McConnell Technology & Training Center, Progress Rail, Systems Fabrication, and Whelan Machine & Tool Company.<sup>35</sup>



Shaded buildings are available for lease. Source: Technology Park of Greater Louisville

Before the transition took place, experts predicted that “the success of [the privatization-in-place plan] depends on the military providing the same level of work to the private contractor that it performed.”<sup>36</sup> The difference in outcomes for United Defense and Raytheon suggests that continued commitment is important, but once privatized, the private sector can more effectively rationalize the excess capacity to achieve profitability, even in the face of significant shifts in demand.

## **Part II Questions**

1. Discuss how all of the stakeholders' interests were addressed.
2. Was this privatization-in-place a successful way to reduce excess capacity?  
Explain.
3. Compare and contrast United Defense's post-privatization reality with that of Hughes/Raytheon. How were their experiences the same? How and why were they different?
4. What, if anything, could United Defense have done differently to ease the transition from a government depot to a private sector facility?
5. Based on the outcomes seen by the various stakeholders, would you say that Louisville's decision to privatize NOSL was a good one? Why or why not?
6. In your opinion, should NOSL be used as a model to privatize other military depots in-place? If so, why? If not, what should be done differently?



## End Notes

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- <sup>1</sup> Kentucky Commission on Military Affairs web site, <http://www.ky.gov/agencies/kcma/assets/operations.htm>.
- <sup>2</sup> Government Accountability Office, *Navy Depot Maintenance: Privatizing Louisville Operations in Place Is Not Cost Effective*, GAO/NSIAD-97-52, July 1997, p. 2.
- <sup>3</sup> Kentucky Commission on Military Affairs web site, <http://www.ky.gov/agencies/kcma/assets/operations.htm>.
- <sup>4</sup> Major Michael T. Braman, *Privatization of Military Repair Depots: A Research Paper Presented to the Research Department Air Command and Staff College*, March 1997, p. 6
- <sup>5</sup> Ibid.
- <sup>6</sup> Government Accountability Office, *Navy Depot Maintenance: Cost and Savings Issues Related to Privatizing-in-Place at the Louisville, Kentucky Depot*, GAO/NSIAD-96-202, September 1996, p. 1.
- <sup>7</sup> Technology Park of Greater Louisville web site, <http://www.technologypark.net/aboutus/>.
- <sup>8</sup> Ibid.
- <sup>9</sup> Global Security web site, <http://www.globalsecurity.org/military/facility/louisville.htm>.
- <sup>10</sup> Ibid.
- <sup>11</sup> Government Accountability Office, *Navy Depot Maintenance: Cost and Savings Issues Related to Privatizing-in-Place at the Louisville, Kentucky Depot*, GAO/NSIAD-96-202, September 1996, p. 3.
- <sup>12</sup> Sheila Foote, "Navy Privatization of Depot's Work Costs Millions, GAO Finds," *Defense Daily*, Vol. 194, No. 52, March 19, 1997.
- <sup>13</sup> United Defense web site, <http://www.uniteddefense.com/co/history.htm>.
- <sup>14</sup> Raytheon web site, <http://www.raytheon.com/products/static/node4746.html>.
- <sup>15</sup> PowerPoint presentation: "Privatizing the Naval Surface Warfare Center Depot at Louisville," Maryland School of Public Policy, Center for Public Policy and Private Enterprise, May 18, 2005, p. 3.
- <sup>16</sup> Ibid.
- <sup>17</sup> PowerPoint presentation: "Presentation to the Louisville/Jefferson County Redevelopment Authority for the Hughes Naval Systems Depot," Hughes Missile Systems Company, March 7, 1996, p. 25
- <sup>18</sup> PowerPoint presentation: "The Privatization of the Louisville Naval Ordnance Station: A Success Story for the Navy, the Community, the Workers, and United Defense," United Defense, September 10, 2004, p. 4.
- <sup>19</sup> Government Accountability Office, *Navy Depot Maintenance: Cost and Savings Issues Related to Privatizing-in-Place at the Louisville, Kentucky Depot*, GAO/NSIAD-96-202, September 1996, p. 8.
- <sup>20</sup> Ibid, p. 6.
- <sup>21</sup> ISO, or the International Organization for Standardization, establishes international standards for particular business and industry sectors. See [www.iso.org](http://www.iso.org).
- <sup>22</sup> PowerPoint presentation: "The Privatization of the Louisville Naval Ordnance Station: A Success Story for the Navy, the Community, the Workers, and United Defense," United Defense, September 10, 2004, p. 6.
- <sup>23</sup> Ibid., p. 10.
- <sup>24</sup> NAVSEA Port Hueneme Louisville Detachment web site, <http://www.phdnswc.navy.mil/Detachments/lv/whatwedo.asp>.

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- <sup>25</sup> Global Security web site, <http://www.globalsecurity.org/military/facility/louisville.htm>.
- <sup>26</sup> Kentucky Commission on Military Affairs web site, <http://www.ky.gov/agencies/kcma/assets/operations.htm>.
- <sup>27</sup> Technology Park of Greater Louisville web site, <http://www.technologypark.net/aboutus/>.
- <sup>28</sup> PowerPoint presentation: "The Privatization of the Louisville Naval Ordnance Station: A Success Story for the Navy, the Community, the Workers, and United Defense," United Defense, September 10, 2004, p. 3.
- <sup>29</sup> Bill Wolfe, "Transfer of Naval Station Complete," *The Courier-Journal*, February 18, 2004.
- <sup>30</sup> Kentucky Commission on Military Affairs web site, <http://ky.gov/agencies/kcma/assets/operations.htm>.
- <sup>31</sup> PowerPoint presentation: "The Privatization of the Louisville Naval Ordnance Station: A Success Story for the Navy, the Community, the Workers, and United Defense," United Defense, September 10, 2004, p. 14.
- <sup>32</sup> ISO-9001 is an international standard that establishes generic requirements for instituting a company's quality management system. [http://www.labconco.com/company/standards\\_certs/iso\\_certification.shtml](http://www.labconco.com/company/standards_certs/iso_certification.shtml)
- <sup>33</sup> Ibid., p. 18.
- <sup>34</sup> Technology Park of Greater Louisville web site, <http://www.technologypark.net/aboutus/>.
- <sup>35</sup> Technology Park of Greater Louisville web site, <http://www.technologypark.net/facilities/tenants.asp>.
- <sup>36</sup> Jonathan S. Landay, "One City Hopes to Keep its Navy Base Afloat by Privatization," *The Christian Science Monitor*, August 15, 1996.